# EXHIBIT 30 Part 1 of 2



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April 1, 2016

To whom it may concern:

This is to certify that the attached translation from Portuguese into English is an accurate representation of the document received by this office. This document is designated as:

# JUDGMENT No. 3362/2010 - TCU - Plenary

George Alves, who translated this document, is certified by this company as fluent in Portuguese and standard North American English and is qualified to translate.

He attests to the following:

"To the best of my knowledge, the accompanying text is a true, full and accurate translation of the specified document."

Signature of George Alves

Subscribed and sworn to before me this \_\_\_\_\_\_ day of \_\_\_

2016.

abeth Griffin

Notary Public, State of New York

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Qualified in New York County

Certificate filed in New York County

Commission Expires July 21, 2018

Sincerely,

Victor J. Hertz

President & CEO

# JUDGMENT No. 3362/2010 - TCU - Plenary

- 1. Process No. TC 009.830/2010-3.
- 2. Group I Class V Subject: Audit
- 3. Interested/Responsible Parties:
- 3.1. Interested Party: National Congress
- 3.2 Responsible Parties: Abenildo Alves de Oliveira (354.708.524-15); Antônio Cesar de Oliveira Silva (081.379.003-49); Armando Feijó de Paula (848.223.414-53); Carlos Henrique Santos Rocha (154.375.585-20); Fernando da Silva Christ (237.603.380-20); Flavio Fernando Casa Nova da Motta (377.258.404-78); Gustavo Andre de Abreu Viana C Camara (031.108.764-77); Heleno Lira (151.074.184-49); Ivo Tasso Bahia Baer (413.054.427-68); Jeremias Luiz da Silva (039.967.304-03); José Raimundo Lima Mendes (229.711.495-87); José Sérgio Gabrielli de Azevedo (042.750.395-72); Leandro Santos da Silva (039.223.744-09); Luis Carlos Queiroz de Oliveira (080.526.797-29); Marcelino Guedes Ferreira Mosqueira Gomes (793.109.077-20); Marcos André Ferreira da Costa (053.293.474-16); Marcos José Pessoa de Resende (128.157.134-20); Marcos Leandro Pereira Soares (796.968.485-87); Omar Antônio Kristoschek Filho (900.295.340-20); Pedro José Barusco Filho (987.145.708-15); Rafael Brandão Rocha (236.807.096-68); Renato Alves Pessoa (084.308.287-96); Ricardo Luiz Ferreira Pinto Tavora Maia (746.600.047-91); Sebastião Marcondes da Silva Júnior (098.720.018-63); Sidney José Honório da Silva (804.864.954-34); Sérgio dos Santos Arantes (335.417.367-04); Venina Velosa da Fonseca (550.496.306-06); Vladimir Ferreira de Oliveira Campos (000.810.686-03).
- 4. Entity: Petróleo Brasileiro S.A. MME.
- 5. Reporter: Minister Benjamin Zymler.
- 6. Representative from the Federal Public Prosecutor's Office: did not act.
- 7. Unit Section of Inspection of Construction Works (SECOB 3)
- 8. Attorney of Record: None.

### 9. Ruling:

REVIEW, report and discussion of these audit records conducted on the construction works of the Abreu e Lima Refinery in Recife/PE, inserted into Fiscobras 2010;

AGREEMENT by the Ministers of the Federal Court of Auditors, in a Plenary session meeting, before the reasons expressed by the Reporter, on:

- 9.1 Determining the realization of a hearing on the following responsible parties, in terms of Article 43, II of Law no. 8.443/92, in light of the evidence of the aforementioned irregularities, as indicated below:
- 9.1.1 Mr. Flávio Fernando Casa Nova da Motta (TIN: 377.258.404-78) Implementation Manager of the UDA and UCR enterprises, in order to present the justifying reasons by virtue of: (a) approving, as a member of the bidding committee (Call notices 0629131098 UCR and 0634314098-UDA, the winning proposals of the bids containing supply prices that were higher than those established in Article 109 of Law 11.768/2008 (LDO 2009); (b) signing said contracts, which gave rise to the possible overpricing of R\$ 133,082,906.66 (one hundred thirty-three million, eighty-two thousand, nine hundred six reais and sixty-six cents) in contract no. 0800.0053456.09-2 (UDA), and of R\$ 522,638,923.70 (five hundred twenty-two million, six hundred thirty-eight thousand, nine hundred twenty-three reais and seventy cents) in contract no. 0800.0053457.09.2 (UCR). (Overpricing arising from excessive prices in light of the market, contract no. 0800.0053456.09-2 and no.0800.0053457.09.2);
- 9.1.2 Mr. Ivo Tasso Bahia Baer (TIN: 413.054.427-68), Implementation Manager of the Pipelines enterprise, in order to present the justifying reasons for: (a) approving, as a member of the bidding committee (Call notice 0629064.09-8), the winning proposal containing supply prices that were higher than those established in Article 109 of Law 11.768/2008 (LDO 2009); (b) signing said contract, which gave rise to the possible overpricing of R\$ 316,951,565.62 (three hundred sixteen million,

nine hundred fifty-one thousand, five hundred sixty-five reais and sixty-two cents) in contract no. 0800.0057000.10-2 (Pipelines). (Overpricing arising from excessive prices in light of the market, contract no. 0800.0057000.10-2);

- 9.1.3 Mr. Marcos José Pessoa de Resende (TIN: 128.157.134-20), Implementation Manager of the UHDT/UGH enterprise, in order to present the justifying reasons for: (a) approving, as a member of the bidding committee (Call notice 0634316.09-8), the winning proposal containing input prices that were higher than those established in Article 109 of Law 11.768/2008 (LDO 2009); (b) signing said contract, which gave rise to the possible overpricing of R\$ 351,443,396.04 (three hundred fifty-one million, four hundred forty-three thousand, three hundred ninety-six reais and four cents) in contract no. 0800.0055148.09-2 (UHDT/UGH). (Overpricing arising from excessive prices in light of the market, contract no. 0800.0055148.09-2);
- 9.1.4 Mr. Luis Carlos Queiroz de Oliveira (TIN: 080.526.797-29), Coordinator of the Bidding Committee for the UHDT/UGH enterprise (Call notice 0634316.09-8), in order to present the justifying reasons for approving, as a member of the bidding committee, the winning proposal containing input prices that were higher than those established in Article 109 of Law 11.768/2008 (LDO 2009), and which gave rise to the possible overpricing of R\$ 351,443,396.04 (three hundred fifty-one million, four hundred forty-three thousand, three hundred ninety-six reais and four cents) in contract no. 0800.0055148.09-2 (UHDT/UGH). (Overpricing arising from excessive prices in light of the market, contract no. 0800.0055148.09-2);
- 9.1.5 Mr. Omar Antônio Kristocheck Filho (TIN: 900.295.340-20), Coordinator of the Bidding Committee for the UDA and UCR enterprises (Call notices 0629131098- UCR and 0634314098-UDA) and Contract Manager for the UCR enterprise (contract no. 0800.0053457.09.2), to present the justifying reasons for accepting winning proposals containing input prices that were higher than those established in Article 109 of Law 11.768/2008 (LDO 2009), and which gave rise to the possible overpricing of R\$ 133,082,906.66 (one hundred thirty-three million, eighty-two thousand, nine hundred six reais and sixty-six cents), in contract no. 0800.0053456.09.2 (UDA) and R\$ 522, 638,923.70 (five hundred twenty-two million, six hundred thirty-eight thousand, nine hundred twenty-three reais and seventy cents) in contract no. 0800.0053457.09.2 (UCR). (Overpricing arising from excessive prices in light of the market, contract no. 0800.0053456.09-2 and no. 0800.0053457.09.2);
- 9.1.6 Mr. Ricardo Luiz Ferreira Pinto Távora Maia (TIN: 746.600.047-91), Coordinator of the Bidding Committee for the enterprise in contract no. 0800.0057000.10-2, to present the justification for accepting winning bids containing supply prices that were higher than those established in Article 109 of Law 11.768/2008 (LDO 2009), and which gave rise to the possible overpricing of R\$ 316,951,565.62 (three hundred sixteen million, nine hundred fifty-one thousand, five hundred sixty-five reais and sixty-two cents) in contract no. 0800.0057000.10-2 (Pipelines). (Overpricing arising from excessive prices in light of the market, contract no. 0800.0057000.10-2);
- 9.1.7 Mr. Sérgio dos Santos Arantes (TIN: 335.417.367-04), Engineering Manager of the SL-ECP, to present the justifying reasons for approving cost estimates on the processes that resulted in contracts with evidence of overpricing of R\$ 1,324,116,792.62 (one billion, three hundred twenty-four million, one hundred sixteen thousand, seven hundred ninety-two reais and sixty-two cents -14%) for the audited contracts no. 0800.0053456.09-2 (UDA), no. 0800.0053457.09.2 (UCR), contract no. 0800.0057000.10-2 (Pipelines), contract no. 0800.0055148.09-2 (UHDT/UGH), thereby not complying with Article 109 of Law 11.768/2008 (LDO 2009), as well as the jurisprudence of the TCU (Agreements 325/2007, 1599/2008 and 1607/2008, Federal Court of Auditors, Plenary); (Overpricing arising from excessive prices in light of the market).
- 9.2 To provide a study of the present report to Petrobras and the following contracted companies and consortia, informing them that, if they see fit, they are allowed to intervene in the records in order to present the necessary elements for the defense of their interests, within a period of 15 days, regarding the evidence of irregularities noted in this report that could give rise to the determination for Petrobras to reprice the respective contracts. (Overpricing arising from excessive prices in light of the

- Market). (i) ODEBRECHT PLANTAS INDUSTRIAIS E PARTICIPACOES S/A -EIN 09.334.075/0001-83 (contracts no. 0800.0053456.09.2 UDA and no. 0800.0055148.09.2 UHDT); (ii) CONSTRUTORA OAS LTDA EIN 14.310.577/0001-04 (contracts no. 0800.0053456.09.2 UDA and no. 0800.0055148.09.2 UHDT); (iii) RNEST CONEST CONSORTIUM EIN 11.045.775/0001-08 (contracts no. 0800.0053456.09.2 UDA and no. 0800.0055148.09.2 UHDT); (iv) CONSTRUCOES E COMERCIO CAMARGO CORREA S/A EIN 61.522.512/0001-02 (contract no. 0800.0053457.09.2 UCR); (v) CNEC ENGENHARIA S.A. EIN 61.564.639/0001-94 (contract no. 0800.0053457.09.2 UCR); (vi) CONSORCIO CNCC CAMARGO CORREA CNEC EIN 10.517.133/0001-93 (contract no. 0800.0053457.09.2 UCR); (vii) CONSTRUTORA QUEIROZ GALVAO S/A EIN 33.412.792/0001-60 (contract no. 0800.0057000.10-2 Pipelines); (viii) IESA OLEO&GAS S/A EIN 07.248.576/0001-11 (contract no. 0800.0057000.10-2 Pipelines) and (ix) CII CONSORTIUM IPOJUCA INTERLIGACOES CONSORTIUM EIN 11.387.267/0001-08 (contract no. 0800.0057000 Pipelines).
- 9.3 Based on Article 42, §1 of Law no. 8.443/92, under Article 245, Subsection II of the Internal Statute, to assign a deadline of 15 days for Petrobras to deliver copies, in digital media, of the complete set of the Studies on Technical, Economic and Environmental Viability, in reference to the Abreu e Lima Refinery (PE) enterprise, as foreseen in the Corporate Analysis Manual of Petrobras Investment Projects (2006), the Presentation Manual of Viability Studies on Large-Scale Projects, a document approved by the Committee on Monitoring and Evaluation of the Multiannual Plan 2008-2011 (CMA), as well as Petrobras' internal standard PG-12-SL/ECP- 001, with the respective approvals from the competent authorities or responsible parties, accompanied by:
- 9.3.1 The supporting package for the decision at all levels (FEL-1, FEL-2 and FEL-3), adopted by Petrobras, or economic/financial Evaluation Reports, or even, documents containing the information on the Technical and Economic Viability Study (EVTE).
- 9.3.2 Electronic spreadsheets developed for the economic/financial evaluation of the enterprise, in magnetic media, with formulas described, without the need for access or any type of block on the calculations, and, as may be the case, a description of the spreadsheets presented, according to the method of Discounted Cash Flow (FCD);
- 9.3.3 A study of sales demand or volume, developed from the characteristics of the enterprise, including all the operational receipts or others that may come to comprise the total receipts, and even specifying the area of influence of the project;
  - 9.3.4 Estimated costs and expenses for the provision of services or for production;
- 9.3.5 A projection of the receipts, of the operational costs and expenses, duly founded on economic and financial premises;
- 9.3.6 Economic and financial premises (e.g.: the price of the product or the input, exchange rate, inflation rate, growth tax from the Internal Gross Product (PIB), etc.) used for a projection of the cash flow components, based on official sources, or, if unofficial sources are adopted, to present justification for such a measure;
- 9.3.7 Investments to be carried out, with the date of reference and described quantitatively with prices used in the budget;
- 9.3.8 Parameters to be used in defining the discount rate or the minimum attractiveness rate, accompanied by the respective calculations, defining criteria and justifications, consistent with the WACC;
  - 9.3.9 A database and a horizon of the projection, according to the stabilization of the cash flow;
  - 9.3.10 A calculation and value of perpetuity, as may be the case;

- 9.3.11 An analysis of the sensitivity of the main premises that influence the cash flow:
- 9.3.12 Operational, technical parameters aimed at optimizing the capacity of production and of idleness, for the internal and external market, which allows for verifying the investment alternatives, demonstrating these from the economic/financial viewpoint.
- 9.4 To communicate to the Mixed Committee on Planning, Public Budgets and Supervision of the National Congress that under the present inspection, evidence of irregularity was detected, which is set forth in the provisions of Subsection IV of §1 of Article 94 of Law no. 12.017/2009 (LDO/2010) for the contracts described below, pertaining to the Construction work at the Abreu e Lima Refinery in Recife, in the State of Pernambuco, there having been estimated damages to the public treasury of R\$ 1,324,116,792.62 (one billion, three hundred twenty-four million, one hundred sixteen thousand, seven hundred ninety-two reais and sixty-two cents), and that its correction depends on the repricing of the respective contracts, as described below:
- UDA, 0800.0053456.09.2: R\$ 133,082,906.66 (one hundred thirty-three million, eighty-two thousand, nine hundred six reais and sixty-six cents);
- UHDT, 0800.0055148.09.2: R\$ 351,443,396.04 (three hundred fifty-one million, four hundred forty-three thousand, three hundred ninety-six reais and four cents);
- UCR, 0800.0053457.09.2: R\$ 522,638,923.70 (five hundred twenty-two million, six hundred thirty-eight thousand, nine hundred twenty-three reais and seventy cents);
- Pipelines, 0800.0057000.10-2: R\$ 316,951,565.62 (three hundred sixteen million, nine hundred fifty-one thousand, five hundred sixty-five reais and sixty-two cents).
- 9.5 To provide a study of this deliberation, accompanied by the report and vote that they are based on, to the Mine and Energy Commission of the Chamber of Deputies, to the Federal Police Department, to the Federal Public Prosecutor's Office; which folder is linked to Petrobras.
- 9.6 To form processes from the copy of the investigation report and from this deliberation, as well as through the extraction from the present records on the documents referring to each of the contracts listed below, for an examination of the hearings determined herein, as well as taking other procedural measures that may be necessary:
- 0800.0053456.09-2, 01/28/2010; Necessary services and supplies for the implantation of the Atmospheric Distillation Units UDA (U-11 and U-12), at the Refinaria Abreu e Lima S.A. RENEST;
- 0800.0053457.09.2, 02/05/2010; Delayed Coking Units (U-21 and U-22), their substations and Control Houses, their Caustic Regenerative Treatment Departments (U-26 and U-27);
- 0800.0057000.10-2, 04/16//2010; Necessary services and supplies for the implantation of the pipelines for the RNEST interconnections;
- 0800.0055148.09-2, 02/09/2010; Diesel Hydro-treatment Units (U-31 and U-32), Naphtha Hydro-treatment Units (U-33 and U-34), and Hydrogen Generation UGH (U-35 and U-36);
- 9.7 Affix the seal of confidentiality to the documents that comprise Appendices II, III, IV, V, VI and VIII of this proceeding, which contain all the elements classified with restricted access by Petrobras.
- 10. Minutes no. 49/2010 Plenary.
- 11. Session Date: 12/8/2010 Extraordinary.
- 12. Electronic code for locating on the TCU Internet page: AC-3362-49/10-P.
- 13. Specification of the quorum:

[Logo] FEDERAL COURT OF AUDITORS

TC 009.830/2010-3

- 13.1. Ministers in attendance: Ubiratan Aguiar (President), Valmir Campelo, Walton Alencar Rodrigues, Benjamin Zymler (Reporter), Augusto Nardes, Aroldo Cedraz, Raimundo Carreiro and José Jorge.
- 13.2. Auditors called: Marcos Bemquerer Costa and André Luís de Carvalho.
- 13.3. Auditors in attendance: Augusto Sherman Cavalcanti and Weder de Oliveira.

(Signed electronically)
UBIRATAN AGUIAR
President

(Signed electronically) BENJAMIN ZYMLER Reporter

I was in attendance:

(Signed electronically)
LUCAS ROCHA FURTADO
Attorney General

[Logo] FEDERAL COURT OF AUDITORS

TC 009.830/2010-3

GROUP I – CLASS V – Plenary TC 009.830/2010-3.
Type: Audit Report.

Entity: Petróleo Brasileiro S.A.

Responsible parties: Abenildo Alves de Oliveira (354.708.524-15); Antônio Cesar de Oliveira Silva (081.379.003-49); Armando Feijó de Paula (848.223.414-53); Carlos Henrique Santos Rocha (154.375.585-20); Fernando da Silva Christ (237.603.380-20); Flavio Fernando Casa Nova da Motta (377.258.404-78); Gustavo Andre de Abreu Viana C Camara (031.108.764-77); Heleno Lira (151.074.184-49); Ivo Tasso Bahia Baer (413.054.427-68); Jeremias Luiz da Silva (039.967.304-03); José Raimundo Lima Mendes (229.711.495-87); José Sérgio Gabrielli de Azevedo (042.750.395-72); Leandro Santos da Silva (039.223.744-09); Luis Carlos Queiroz de Oliveira (080.526.797-29); Marcelino Guedes Ferreira Mosqueira Gomes (793.109.077-20); Marcos André Ferreira da Costa (053.293.474-16); Marcos José Pessoa de Resende (128.157.134-20); Marcos Leandro Pereira Soares (796.968.485-87); Omar Antônio Kristoschek Filho (900.295.340-20); Pedro José Barusco Filho (987.145.708-15); Rafael Brandão Rocha (236.807.096-68); Renato Alves Pessoa (084.308.287-96); Ricardo Luiz Ferreira Pinto Tavora Maia (746.600.047-91); Sebastião Marcondes da Silva Júnior (098.720.018-63); Sidney José Honório da Silva (804.864.954-34); Sérgio dos Santos Arantes (335.417.367-04); Venina Velosa da Fonseca (550.496.306-06); Vladimir Ferreira de Oliveira Campos (000.810.686-03)

Interested Party: National Congress

Attorneys of Record: None.

SUMMARY: AUDITING SURVEY (FISCOBRAS 2010) ABREU E LIMA REFINERY/PE. CONTRACTS 0800.0053456.09-2 (UDA), 0800.0053457.09-2 (UCR), 0800.0055148.09-2 (UHDT), and 0800.0057000.10-2.

(INTERCONNECTIONS - PIPELINES). ACCEPTANCE OF PROPOSALS IN HIGHER AMOUNTS THAN THE BUDGETED AMOUNT. OBSERVANCE OF THE ENTITY'S INTERNAL STANDARD THAT ADMITS A PRICE VARIATION BETWEEN -15% AND +20% IN RELATION TO THE VALUE OF THE ESTIMATED COSTS BY REASON OF IMPRECISION OF THE BASIC PROJECTS. ADJUSTMENTS TO PETROBRAS' COST ESTIMATES. CONTRACTED AMOUNTS HIGHER THAN THE ADJUSTED COSTS FROM THE ESTIMATES AND ALREADY CONSIDERING A PERCENTAGE OF +20% ADOPTED BY THE ENTITY. EVIDENCE OF OVERPRICING. IGP. HEARINGS. STUDY OF THE DEFICIENT TECHNICAL AND ECONOMIC/FINANCIAL VIABILITY. DUE DILIGENCE. NATIONAL COMMUNICATION THE CONGRESS. OTHER TO COMMUNICATIONS.

#### REPORT

I adopt as a report part of the instruction from pgs. 75-134 (see page), with which proposal for forwarding the higher courts of Secob [Secretariat of Construction Works and Assets Inspection] -3, expressed agreement, verbis:

'This is an audit carried out in Petróleo Brasileiro SA. - MME, in the period comprised of 04/12/2010 to 05/28/2010.

The objective of the present audit was the inspection of the construction works of the following units: UCR; UHDT/UGH, UDA and Pipelines. Based on the objective of the study and with the purpose of assessing to what extent the resources are being applied pursuant to the relevant legislation, questions have been formulated as indicated below:

- 1 Is the budget forecast for the execution of the work appropriate?
- 2 Are there feasibility studies that prove the technical, economic and environmental feasibility of the work?
- 3 Does the type of enterprise require environmental permits and did it carry out all the steps necessary for this license?
- 4 Is the basic/executive project suitable for the bid/execution of the work?
- 5 Were the bidding procedures regular?
- 6 Did the formalization of the contract meet the legal requirements and was its execution appropriate?
- 7 Is the budget of the construction work duly detailed (spreadsheets of quantitative data and unit prices) and accompanied by the compositions of all the unit costs of its services?
- 8 —Is the quantitative data defined in the budget of the project consistent with the quantitative data presented in the basic/executive project?
- 9 Are the prices defined in the project budget compatible with the market values?
- 10 Is the administration board making arrangements in order to regularize the situation of the construction work?

The main findings of this study were the following:

- Overpricing resulting from excessive prices if compared to market prices (IGP) [Grave Irregularities with Standstill Recommendation]. The overpricing was based on analysis made at Petrobras' cost estimate (Base Budget), and reached the figure of R\$ 1,324,116,792.62, equivalent to 14% of the value of the contracts;
- Study of technical, economic and financial feasibility proved to be deficient. The documents submitted by Petrobras during the audit do not characterize an EVTE-A [Study of technical-economic and environmental feasibility].

The scope of the audit also included the assessment of the measures adopted by Petrobras in regard to findings presented in Fiscobras [Report of Public Works Inspection] 2009, which were classified as IGP. Concerning these findings, the following was determined:

- Overpricing due to excessive prices when compared to the market: Petrobras delivered new information regarding the analyzed contracts, which were not made available in the scope of Fiscobras 2009, which was also considered obstruction of inspection. As a consequence of this new information, the auditing team expanded the analyzed sample. Based on the new analysis performed, the classification of the irregularities is proposed to be GI-C [Grave and Irreparable Irregularities].
- Inadequate measurement criteria: it was found that Petrobras has adopted measures that mitigate the potential risk of harm to the public treasury. In view of the observation of TCU [Federal Court of Auditors], Petrobras did not perform payments pertaining to the "award of damages" for any of the contracts, as presented by measurement reports. Therefore, the irregularities are classified as IG-C.

The volume of inspected resources (VRF) reached a figure of R\$ 14,755,411,436.80, and the values settled up to April 2010, R\$ 1,302,730,311.84.

The proposal of forwarding includes hearing and communication to the National Congress.

#### 1-PREAMBLE

The Northeast Refinery- RNEST, or Abreu and Lima Refinery, will be located in the district of Ipojuca-PE, south of the metropolitan region of Recife, and will occupy an area of 6.30 km² in the industrial and port complex of SUAPE. The RNEST will have a processing capacity of 230 thousand barrels of national heavy oil per day (Marlim-50%) and synthetic Venezuelan oil (Carabobo-50%), aiming to meet national demand, especially in the north and northeast regions of subsidiaries, such as Naftha Petrochemicals (2,300 m³/day), Liquefied Gas from Petroleum (1.600 m³/day) "GLP" Diesel (22.000m³/day), 'Bunker' (950 tons/day) and Petroleum Coke (5.500 tons/day).

There is also a forecast for H-BIO biofuel production, based on oleaginous plants cultivated by local family farming. It is a development included in 'PAC' Growth Acceleration Program in which the amount of resources add up to R\$ 25 billion, according to information provided by Petrobras at the presentation meeting. The construction works started in 2007 and the start of operation is foreseen for the middle of 2013.

## Socio-economic importance

Three decades having elapses since the implementation of the last Refinery built in the country (REVAP in São José dos Campos - SP), the installation of the Abreu e Lima Refinery in the Northeast region is a large enterprise with great impact, being able to provide approximately 1,600 direct and indirect jobs in the operating phase, and more than 200 thousand jobs during the implementation phase from 2007 to 2012. The income generation for the local population will leverage the economy of the entire region. There will be demands for professionalization and training. Through direct and indirect activity, the growth of tax revenue will increase the capacity of investment of the state of Pernambuco and especially the city of Ipojuca. The SUAPE Industrial Complex will also have an increase in its port activity, due to shipping and unloading operations of raw materials and products related to the activity the plant. Besides the production of diesel fuel and other products, a production of 1,100 tons/month of H-BIO (biofuel) is planned, originating from oleaginous plant input, with the aim of increasing its usage and the local family agriculture, which will also boost the local economy.

#### 2 - INTRODUCTION

#### 2.1 - Resolution

Pursuant to the Judgment 442/2010 - Plenary, the audit of Petróleo Brasileiro S.A. – MME was performed, in the period from 04/12/2010 to 05/28/2010.

This audit was motivated on grounds of the materiality of the resources involved (almost R\$ 15 billion), combined with indications of irregularities pointed out in the Fiscobras 2008 and 2009.

# 2.2 - Overview of the object

The works started in 2007 and the forecast of conclusion and start of operation is the middle of 2013. The shareholding composition planned for the project is presented as follows: Petrobras 60% and PDVSA (Venezuelan Oils) 40%. However, the countries have not reached an agreement and investments have been performed exclusively by Petrobras.

The current phase of the enterprise corresponds to 21.3% of physical completion, according to information provided by Petrobras itself, for April, 2010. The main contracts in progress are the following:

- 1 Earthmoving, with updated value (14th Addendum Term): R\$ 527,439,663.08 (06/01/2007), with more than 90% achieved;
- 2 Powerhouse (CAPOR): R\$ 920,929,201.41 (01/21/2009);
- 3 Water Treatment Plant (ETA): R\$ 774,000,000.00 (12/10/2008);

- 4 Tanks Lot I: R\$ 527, 500,000 (12/01/2008);
- 5 Tanks Lot II: R\$ 730,750,000.00 (12/01/2008);
- 6 Buildings: R\$ 591,324,228.09 (12/01/2008);
- 7 Delayed Coking Unit (UCR): R\$ 3,411,000,000.00 (05/15/2009);
- 8 Atmospheric Distillation Units (UDA): R\$ 1,485,103, 583. 21 (05/15/2009);
- 9 Hydro-treatment Units, of Naphtha Hydro-treatment and of Hydrogen Generation Units (UHDT/UGH): R\$ 3,190,646,503. 15 (05/15/2009);
- 10 Interconnections (Pipelines): R\$ 2,694,950,143. 93 (09/25/2009).

## 2.3 - Objective and issues of audit

The objective of the present audit was the inspection of the implementation works of the following units: UCR, UHDT/UGH, UDA and Pipelines. Besides this, it extended its scope of study to the assessment of the arrangements made by Petrobras, concerning the other units listed in the previous item, about the findings that gave rise to IG-P in the Fiscobras 2009, which were: overpricing and inadequate mediation criteria.

Based on the object of the study and with the purpose of assessing to what extent the resources are being applied pursuant to the relevant legislation, the below displayed questions have been formulated:

- 1 Is the budget forecast for the execution of the work appropriate?
- 2 Are there feasibility studies that prove the technical, economic and environmental feasibility of the work?
- 3 Does the kind of project require environmental permits and did it carry out all the stages necessary for this license?
  - 4 Is the basic/executive project suitable for the bid/execution of the work?
  - 5 Were the bidding procedures regular?
- 6 Did the formalization of the contract meet the legal requirements and was its execution appropriate?
- 7 Is the budget of the construction work duly detailed (spreadsheets of quantitative data and unit prices) and accompanied by the compositions of all the unit costs of its services?
- 8 –Is the quantitative data defined in the budget of the project consistent with the quantitative data presented in the basic/executive project?
  - 9 Are the prices defined in the project budget compatible with the market values?
- 10 Is the administration board making arrangements in order to regularize the situation of the construction work?

## 2.4 - Methodology used

In order to carry out this study, the guidelines of the compliance audit were followed, with the following methods being applied:

- documentary analysis;
- research in computer systems;
- match of information and documents;
- comparison with the legislation, case law of TCU and doctrine;
- calculation checkout.

# 2.5 - Limitations

The team faced limitations as to its performance due to the fact that it did not have the Price Estimate of SL/ECP - PETROBRAS in editable electronic spreadsheet for any of the audited contracts; greatly hampering the analysis of the estimates, as well as the recount of calculations contained in the formulas of the cells of these electronic spreadsheets. Files were forwarded in image format, thus making the analysis for this auditing team difficult, and resulting in the need to convert some of the presented spreadsheets from "pdf" files into "xls" files, which requires much time and work.

# 2.6 - VRF [Volume of Resources Inspected]

The volume of inspected resources reached the figure of R\$ 14,755,411,436.80. This figure is based on the contracted values which were inspected and signed up to April 2010, as follows:

- 1 Earthmoving: R\$ 527,439,663.08,
- 2 Powerhouse (CAFOR): R\$ 966,103,305.78,
- 3 Water Treatment Plant (ETA): R \$ 774,000,000.00,
- 4 Tanks Lot I: R\$ 527,500,000.00,
- 5 Tanks Lot II: R\$ 730,750,000.00.
- 6 Buildings: R\$ 591 .324.228.09,
- 7 Delayed Coking Unit (UCR): R\$ 3,411,000,000.00,
- 8 Atmospheric Distillation Units (UDA): R\$ 1,485 .103,583.21,
- 9 Diesel Hydro-treatment Units, Naphtha Hydro-treatment and Hydrogen Generation Units (UHDT/UGH): R\$ 3,190,646,503.15
- 10 Interconnections (Pipelines): R\$ 2,694,950,143.93,

#### 2.7 - Estimated Benefits

Among the estimated benefits of this inspection, a potential savings of R\$ 1,324,116,792.62, is pointed out, due to a possible reduction in the value of the 4 contracts (UDA, UCR, UHDT/UGH and Pipelines), which is equivalent to overpricing of 14%.

It is essential to emphasize that the 14% of overpricing detected in the 4 contracts aforementioned originates from the amounts that surpass the "CEILING" of price acceptability of Petrobras, which, for the present case, would be 20% above the Estimate developed by the Company and adjusted by the Technical Unit. If this percentage of +20% is disregarded (prevailing only the adjustments of the Technical Unit), this benefit could reach R\$ 2,669,848,785.06 (32.91% that would be renegotiated for the same contracts).

Also considered a potential benefit is the non-payment of the forecast amounts of funds due to rains, referring to the signed contracts, which, in the patterns in which they are currently found, could result in losses for the public treasury and Petrobras (positive economic impact).

Added to the benefits is the supply of subsidies for the performance of the National Congress.

# 3 - FINDINGS OF THE AUDIT

## 3.1 - Overpricing due to excessive prices if compared to the market.

# 3.1.1 – Typifying the finding:

Classification - grave with standstill recommendation

Justification of inclusion (or not) in the framework of grave irregularities of LDO [Law of Budgetary Guidelines] - The current irregularity falls within Article 94, Section 1, item IV of Law 12.017/2009 (LDO 2010) [Law of Budgetary Guidelines 2010], knowing that the irregularity pointed out, overprice of R\$ 1,324,116,792.62, is materially relevant in relation to the total contracted value (14% of overprice), and has the potential to result in loss for the public treasury or for third parties, furthermore, it also: (i) makes it possible to result in the invalidity of tender procedures or of contract, and (ii) represents a grave deviation in relation to

the principles to which the Public Administration is subject, especially to the principles of economy in administrative actions.?

It is also emphasized that by evaluating the percentage already achieved of the contracts with IG-P [Grave Irregularities with Standstill Recommendation] proposal, we realize that the implementation of corrective measures can be made in timely manner, without further complications:?

UDA: 4.12%: UCR: 0.59%; UHDT: 0% and Pipelines 0%.

It is noteworthy that for the contract no. 0800.0053456.09-2 (UDA) the percentages of the indication of overprice in relation to the total value of the legal contract is of 8.80%. Nevertheless, before the materiality of this possible overprice - R\$ 133,082, 906.66 and also in face of the slow physical progress of the construction of 4.12%, it is understood that the requirement of Law 12.017/2009 (LDO 2010) [Law of Budgetary Guidelines 2010] remain present, which justify the suspension of the object due to the existing indications of irregularity (overpricing due to excessive prices if compared to the market).?

#### 3.1.2 - Situation encountered:

In the analysis carried out on contracts no. 0800.0053456.09-2 (Atmospheric Distillation Unit - UDA), 0800.0053457.09-2 (Delayed Coking Unit - UCR), 0800.0055148.09-2 (Diesel Hydro-treatment Units, Naphtha Hydro-treatment and Hydrogen Generation Units- UHDT) and 0800.0057000.10-2 (Interconnections - Pipelines), overpricing of R\$1,324,116,792.62 was found, equivalent to 14% in relation to market benchmarks, according to methodology presented below.

The assessment of overpricing aforementioned above involved: (i) analysis of applicability of the acceptability range (-15% to + 20%) in PART of the values of price proposals considered in Petrobras' cost estimates and (ii) analysis of the prices of inputs adopted in Petrobras' cost estimates, in compliance with Article 109 of Law 11,768/2008 (LDO/2009) [Law of Budgetary Guidelines/2009]. It is important to inform about the applicability of Sinapi and the provisions of LDO to Petrobras, as pled in Judgment 847/2010-Plenary.

For analyzed contracts, Petrobras adopted a Basic Project in the level FEL-3, a classification adopted by Petrobras to define the level of detail adopted for the bid. For this level of detail, Petrobras allows a variation of -15% and +20% as acceptability of the proposals presented, in relation to its cost estimate.

It is emphasized that the contracted values could range up to R\$ 3.16 billion - amount generated by the application of the range of -15% to + 20% to the total value of the estimate for the four contracts, R\$ 9.03 billion. It is also noteworthy that the developing of executive projects is part of the aforementioned contracts, whose values estimated by Petrobras add up to (for the four contracts) R\$ 221.6 million. Values foreseen in Petrobras' cost estimates.

If Petrobras would have carried out more detailed projects before the contracting stage, the majority of the risks involved in the contracts (embedded in the proposed prices), as well as in the Petrobras' cost estimates, could be minimized, when the range of acceptability of proposals is lowered, resulting in more economical contracts.

Before getting further into the analysis made of the Petrobras' cost estimates, it should be aforementioned that a price formation of an engineering work or service takes into account: (i) the quantitative data of services, planned beforehand in a project; (ii) consumption of the inputs involved in this service and (iii) the price of the inputs. As will be determined below, the analysis performed by this team took into account: the price of inputs, as provided in Article 109 of LDO/2009; evaluation of the appropriateness of the range of acceptability of the price proposals adopted by Petrobras and the BDI [Indirect Costs and Benefits] for the supply of materials and equipment (BDI differential).

Methodology of cost estimation of Petrobras.

The Petrobras' cost estimates, conducted by SL-ECP [unit responsible for Cost Estimate of Petrobras], adopted as an initial premise of analysis the estimation of the quantitative data of work elements (tons of structures, tons

of plates, tons of pipes, m³ of cement, equipment weight etc.), planned in the basic project (level FEL-3).

Thus, based on the labor consumption (man-hours - MH) per unit of this work element (of the work as a whole, or of service groups), Petrobras estimates the total quantitative data of personnel for the execution of future installations of the contracts in question. Based on the estimates, for each activity, of the total of MH the remaining items are determined (food, transport, security, environment, health etc.), as well as the scaling of the team (manager, servant, welder etc.).

However, it can observed that, despite the uncertainties caused by the basic project on the level adopted for the bid (FEL-3), Petrobras adopted numerous coefficients and premises that made the reference values higher than the market benchmarks, leading to the overestimation of its prices (price = quantity x consumption x price of input).

It is the case of the consumption coefficients adopted by the Petrobras' estimates for the dimensioning of quantitative data of equipment and labor, taken from its own database, in which it adopts productivity coefficients of the last plants built, more than 30 years ago, as clarified to the various technicians of this unit in presentations already performed by SL-ECP (unit responsible for Cost Estimate of Petrobras) to the TCU.

It is also a fact that the local administration provided in the contracts, under the Logistics line (in average of the four contracts), represent approximately 20% of the total value estimated for these contracts, compared to the rate of 12% for large construction works, such as hydroelectric plants (rate taken from the average of several UHE budgets collected from Aneel [National Agency of Electric Energy] auctions: Foz do Rio Claro, Barra do Pomba, Retiro Baixo, Baixo Iguaçu, Passo São João, São José, Baguari, Dartanelos, Itaguaçú, Mauá, Mirador, Salto Grande, Telêmaco Borba and UHE Estreito).

However, this percentage from the Local Administration was not analyzed by this auditing team, due to the lack of a specific reference parameter (refineries) for comparison. Moreover, this item consists of salaried teams. Thus, the total of the effective cost and amount of the salaries paid could only be assessed during the contractual execution – effective cost and payroll.

Another highlighted point is the BDI (BDI rate) of services, adopted in cost estimates of Petrobras, which was not analyzed by this auditing team (the reference BDI for the supply of materials and equipment was analyzed). It is observed that the reference values, embodied in case law in this Court of Auditors, appear to be lower, on average, when compared to the BDI rates of services adopted by Petrobras in its cost estimates. Judgment 325/2007-P is noteworthy, which presents a study, for the electricity companies that perform large works, of average and maximum percentages practiced by these large construction companies and automakers, for transmission lines.

Thus, the analysis made by this team was based on the Petrobras' cost estimates particularly, which bring information from its own database as assumptions. This analysis was restricted only in regard to the prices of inputs involved, since the quantitative data of services and consumption involved for the dimensioning of the amount of labor force and equipment, estimated by Petrobras, are not subject to analysis by this team, due to the lack of a database of comparison of these values with the standard parameters of the market. This finding does not rule out the need for Petrobras to prove that such parameters are considered market averages.

It should be pointed out that the methodology used by Petrobras for the preparation of costs estimates by allocation does not present the compositions of the unit costs of the services involved, not even any kind of justification specification for the adopted coefficients, hampering the analysis of the prices practiced by this technical unit.

Approaching this in another way: the values that make up ANY service ALWAYS present three variables, namely: (i) quantitative data of services involved, (ii) coefficients of input consumption involved in this service and (iii) the price of inputs. The methodology adopted by the Company does not clarify either the total quantitative data PER SERVICE, or the consumption coefficients PER SERVICE, which makes it difficult for SECOB [Secretariat of Construction Works and Assets Inspection] to assess the total quantitative data of INPUTS existing in the DFP [Price Formation Statement].

Regarding the analysis of the acceptability range in part of the estimates of Petrobras

Initially, it should be clarified that the aforementioned part of the Petrobras' estimates analyzed in this item, exclusively refers to tagged goods [goods that do not represent inputs in the service provision] and to items with certain quantities.

With respect to the aforementioned contracts, it is clear that the cost estimate adopts a range of variability for the prices proposed, at the occasion of the bid, ranging from -15 to + 20% in relation to the value estimated by it for achievement of the work of the specific audited units, according to the methodology established in the general procedures of Cost Estimates of Petrobras' Investments - SL/ECP - Engineering (PG-12-SL/ECP-001).

It is observed that Petrobras applies this variability range of price acceptance (-15% to + 20%) to the total amount of cost estimates, under the argument that the project, in its form and level of detail adopted for bid (level FEL-3), presents uncertainties that can compromise the value of the estimated quantitative data of services, thus implying variability of the values of the estimate of costs (estimated lump sum amounts).

The criterion of -15% + 20% is an acceptability criterion of LUMP SUM PRICE which does not correspond to Brazilian standards (whether in Law No. 8,666/1993, in Decree No. 2745/1998, or to the Law of Budgetary Guidelines, of the year that the contracting was done or the current year). In contrast, Laws No.

No. 11.768/2008 and 12,017/2009 determine, in Articles 109 and 112, respectively, that UNIT COSTS of inputs or services should be equal to or lower than the average of their correspondents in the National Research System of Construction Costs and Indices (SINAPI) - or other formally approved reference tables - and that only in special conditions, duly justified in a detailed technical report, prepared by a qualified professional approved by a competent authority, may their UNIT COSTS exceed the fixed limit, without hampering the assessment of internal and external inspection bodies. Thus, the limit should be the estimate of Petrobras itself and in this way, the limit of + 20% directly disregards the commandments of the LDO and should not be applied in bids.

Moreover, it is also verified that the level of detail FEL-3 contemplates a greater breakdown that mitigates uncertainties by adding greater reliability to the projects. This other range is of -5% to + 5% (TC 024.626/2006-4). In light of these patterns, the use of the range of -15% + 20% has shown to be unjustifiable up to the present point.

However, items of the contracts and cost estimates are observed that are not variable, such as the ones from tagged goods (with the use of TAG) and items with certain quantities, defined in Appendix XXII of the aforementioned contracts..

The TAG of equipment is only a succinct identification, usually a code, with a letter and number; often only a number. It is clear, exclusive and unique. The use of the TAG facilitates a series of arrangements, in particular those related to controls, as in maintenance activities and others (production, proceedings, quality, security, accounting, etc.). It is a technical language, more accurate than any other description of the equipment.

Regarding the "tagged goods," the project already specifies, for these goods, the quantity predicted in the conceptual projects and in the process design; stages prior to the bid.

The same occurs with the "materials with certain quantities" defined in Appendix XXII of aforementioned contracts (UCR, UDA, UHDT/UGH and Pipelines). Clause 2.1 of the aforementioned appendices is cited,

which deals with the applicability of the appendix: "To assess possible needs for adjustment of the quantitative data of the FEED [Front-End Engineering Design] supplied by Petrobras, and to allow its valuation according to defined criteria." The quantities are guaranteed by Appendix XXII-A —"Table QD — Certain Quantities".

Thus, for the executed quantitative data that exceeds these amounts presented in Appendix XXII-A, there is a contractual provision for renegotiation between the parties for these predefined adjustments.

Therefore, for the analysis of the variability range of acceptance of price proposals from the bid (particularly to the maximum allowed value of + 20%), this auditing team considered that the values of tagged goods (without considering the associated labor) and of the certain quantities (only values of the materials) are not subject to variability of quantitative data (that influence in the price), and therefore, the value estimated by Petrobras for these items should be the maximum; admitting no greater variation.

The table 3.1.4 represents the percentage for each of the analyzed contracts regarding the items which are not subject to variation in quantitative data (tagged goods and materials with certain quantities) in relation to the total estimated values, with the aforementioned considerations having been carried out.

Regarding the analysis of settled prices in the estimated costs of Petrobras (inputs)

The auditing team analyzed the Petrobras' cost estimates for the four contracts undergoing analysis (UCR, UDA, UHDT/UGH and Pipelines), adopted in the corresponding bids as parameter of acceptability of the proposals of the four aforementioned contracts, taking as analysis premise the values of inputs adopted by it, in comparison with the market benchmarks (paradigm).

This analysis is supported in Article 109 of Law 11.768, which establishes that "The lump sum cost of works and services performed with resources of the Union budget will be obtained based on unit costs of inputs or services equal to or lower than the average of its correspondents in the National Research System of Construction Costs and Indices (Sinapi), maintained and publicized on the Internet by the Caixa Econômica Federal [Federal Economic Bank]".

It is noteworthy to highlight that the values researched in Sinapi are the average of the price research elaborated by the CEF (Federal Economic Bank) in the region (capitals of Federative States), that is, 50% of the studied values are higher, and 50% of studied values are lower than the average rate pointed out in the reference tables. Thus, this value cannot be considered a listed value, but as the maximum parameter that is accepted, in accordance with Article 109 of Law 11.768.

In addition, when the constant input of cost estimate of Petrobras was not available in the Sinapi, other reference parameters were adopted, such as SICRO2 [System of Road Transports Costs] (Dnit) [National Department of Transport Infrastructure], Datafolha, the ABEMI Table - Brazilian Association of Industrial Engineering (for large equipment, such as cranes) and Cadterc (Registry of Service Provision of the São Paulo State Government).

It is emphasized that the values extracted from the ABEMI Table (version 2007) were used only for the assessment of values of equipment not found in the systems of sicro or sinapi tables, as observed in the industrial works under discussion.

It is essential to highlight that this point of the SECOB methodology (dealings in industrial works) is in accordance with the text of the Project of Law of Budgetary Guidelines, which is in the enactment phase.

In cases where the specifications required for the work resulted in inputs that were not found in the used references, these items were not analyzed. Therefore, only the prices of inputs were analyzed, whose features were similar to those contained in the references.

Therefore, the sample analyzed for the four contracts covered approximately 70% of Petrobras' cost estimate and included the analysis of the following items:

(i) Direct Labor - MOD (portion of employees with remuneration based on service hours): Petrobras considered, as a parameter of prices and salaries, the constant values of the Collective Labor Agreements of the region plus an additional rate of attractiveness for a possible labor force coming from other states of the federation, other than Pernambuco. This additional rate of attractiveness, with an average rate of 30%, increases the costs of the MOD (direct labor) rubric in the cost estimates of the contracts analyzed.

The adoption of the values established in the Collective Labor Conventions or Agreements (ACT) already set a reasonable value to be adopted as a maximum reference for salary figures of the Direct Labor involved in the construction works of the audited units of the Abreu and Lima Refinery.

In addition, no justification or study was made within Petrobras' cost estimate that would analytically substantiate the reasonableness of this rate of attractiveness by 30%, thus disregarding the provisions of the LDO/2010 in its Section 3 of Article 112. "Only in special conditions, duly justified in a detailed technical report prepared by qualified professional and approved by the managing body of resources or its representative, may the respective unit costs exceed the limit fixed in the main body and Section 1 of this Article, without hampering the assessment of the bodies of internal and external control."

Lastly, it is important to point out that the implementation area of the construction works of Abreu and Lima Refinery near the city of Recife (PE), located in a region still constantly expanding (port Suape and various industries) whose values for labor payment are already included in the ACT. Therefore, the additional rate of attractiveness will not be considered in the salaries of the MOD.

(ii) Indirect Labor - MOI: Constant values of the Datafolha system (Datafolha Research Institute) were used as benchmark.

In particular, the DATAFOLHA system is a credible source in the market of São Paulo and the southeast region of Brazil in general, having the aim of disseminating the average statistics of salaries paid (disregarding the lowest value found, considering the largest and medium), except premiums, benefits, commissions, overtime, compensation for risks involved, and social charges. The research is made in 130 medium and large-sized companies, produced on base of the universe of companies in the four main branches of market activity: Construction, Trade, Industry and Provision of Services. Most of the contractors hired in the construction of Abreu and Lima Refinery have their headquarters in São Paulo; the location where Datafolha Institute research is performed.

Also important to mention is that in the case of management and coordination positions, the greatest constant value of the Datafolha (SP) system was adopted. For other functions, the average rate was adopted.

Finally, it should be reported that the additional values to the salaries of the MOI [Indirect Labor], considered by Petrobras, were kept, such as the additional transfer rate of 25% or 30% (it was considered that the professionals would be receiving an additional rate due to mobilization from other regions) costs of EPI [Equipment for Personal Protection], health insurances, functional medical exams, housing costs, travel costs, communication costs etc.

(iii) Equipment: For the analysis of the prices adopted by Petrobras, a sampling was performed (an ABC curve for each cost estimate). For this sample, the constant values of the official reference systems (Sinapi and Sicro) were used as benchmarks for the equipment prices, considering the use of the equipment for a daily work shift period.

Additionally, for large equipment, not contained in the official reference tables, the values furnished in ABEMI Table [Brazilian Association of Industrial Engineering] - version 2007 were adopted (search of prices in database of Nov/2006, updated to the database of the aforementioned contracts). This operation system was adopted by Petrobras in its estimate of costs.

(iv) Civil Construction - Inputs: for the estimate of the cost of Pipelines, it was found that Petrobras adopted the values from the Sinapi for the city of Natal (RN), as a benchmark for the prices of the

inputs for the compositions of unit costs, although the construction works of the Abreu and Lima Refinery are located near Recife (PE), and this was without any justification whatsoever for the adoption of this premise.

Thus, assessments were made of the inputs adopted in the cost estimates, taking Sinapi/PE as the benchmark for the inputs.

For cost estimates of UCR and UHDT/UGH, the given compositions of the unit costs were analyzed, comparing the given consumption coefficients (for civil works, Petrobras adopted the system of composition of unit costs) with the patterns in the Sinapi system for the city of Recife/PE.

It was further verified that in some analyzed cost estimates, Petrobras added to the estimated values of Civil Construction inputs, a percentage by way of BDI of subcontractors. This BDI was not considered in the reference prices of the team's analysis, since the constant values from the Sinapi had been adopted for such reference. Thus, the adopted reference prices, extracted from the average values of Sinapi, constitute maximum prices, according to LDO2009 [Law of Budgetary Guidelines 2009].

- (v) Food supply: As analysis parameter of the food supply costs (breakfast, lunch, snack and dinner), the auditing team used the reference values stated in the studies made by the State Government of São Paulo, available in Registry of Outsourced Services (Cadterc) of the of the State Government of São Paulo (www.cadterc.sp.gov.br). For the case of reference values of food supplies, Volume 9 (Service Provision of Nutrition and Food to Servers and Employees) as used.
- (vi) Transport: For the analysis of costs related to transport (car rental: 40-passenger bus, 20-passengers Minibus and 10-passenger Van), contained in the "logistics" line of the analyzed contracts, the studies done by the State Government of São Paulo, available in the Registry of Outsourced Services (Cadterc) of the SEI [Electronic System of Information] (www.cadterc.sp.gov.br) were used as a reference parameter (paradigm price).

For the case of reference values for Transport (rental), Volume 4 (Service Provision of Employee Transport, under Continued Chartering Agreement) was used.

It is observed that Petrobras itself, in its statement in the proceedings TC-008 472/2008-3 (Contract no. 0800.0033808.07.2 for Earthmoving of Abreu and Lima Refinery), adopts the studies made by the State Government of São Paulo (Cadterc), as justification for the values practiced in the current contract (in this case, Earthmoving).

(vii) BDI on supply of goods: For the supply of goods, provided in the spreadsheet on supply of materials and equipment (goods), Petrobras adopts an estimated cost, based on its internal database, plus a BDI for supply (differential BDI), that is, Petrobras itself establishes a differential BDI for such goods. However, it adopts different forms of dealing with this differential BDI for the different contracts: (i) BDI supply for UCR, UDA and UHDT = 27.51%, (ii) BDI of equipment and materials by resale of the contract for Pipelines = 18, 91% and (iii) BDI of equipment for assignment of rights and responsibilities of the contract of Pipelines = 16.38%.

First, it is observed that, for the various contracts audited, Petrobras adopts different calculation methodologies of the differential BDI for goods. However, it is observed that the values assigned to the referred BDI are much higher than the amounts considered suitable for this purpose, as can be observed in with several of the judgments of this Court of Auditors. The following Judgments state it: 1020/2007, 325/2007, 818/2007, 2649/2007, 1607/2008 1599/2008, 1803/2008, 1988/2008, 1947/2008, 157/2009, 2875/2008, and the whole Plenary of this Court of Auditors. Thus, it is observed that the percentage of BDI for the material supply, contained in the case law of this Court, is around 10%, being able to reach 13% in exceptional cases. Recalling that no justification whatsoever was stated in the budgetary estimates to adopt rates so much higher than the pattern established by the case law of this Court.

The percentage of 13% (conservative criterion) as BDI was considered by this auditing team, for the supply of goods and equipment for the four analyzed contracts.

It is important to highlight that the values of goods reported by Petrobras have no comparative in the researched official systems, and that the state-owned company did not indicate, in the cost estimates delivered in pdf format, the origin of the diverse values of the reported goods which are stored in their databases (finalized contracts, market research etc.). This team adopted in its calculations the values reported by Petrobras; adopting the BDI of 13% (differentiated BDI for supply).

It is also fundamental to comment that some estimates were delivered complete (folder with the information on costs) and in digital form (Excel) after the field phase of the audit. In a brief evaluation, it can be verified that the direct cost of the equipment is in largely obtained through quotations originating from business proposals taken from the market by Petrobras, for example, aluminum dome for Tanks Lot II – proposal of company EMCOHITRRAX ENGINEERING. Thus, the direct cost used by the company would not adjust a portion of overpricing, leaving it to the Technical Unit to analyze the BDI for the verification of appropriateness of the price of this equipment.

- Regarding the market values of the analyzed contracts

Tables 3.1.3 and 3.1.2 consolidate the analysis carried out by this auditing team, for the four analyzed contracts (UCR, UDA, UHDT and Pipelines), presenting, for each contract, the analyzed values. Thus, for the analyzed cost estimation, the percentage of variability of acceptability of the proposals was added, corresponding to zero for the values of inputs of tagged goods and materials with certain quantities, and 20% for other items of the cost estimation.

Therefore, the overprice pointed out was the difference between the effectively contracted values and the values of the adjusted cost estimates, plus the appropriate variability range, that is, the values above the acceptability criterion of Petrobras itself. No addenda have been made on the values of any of the contracts (UCR, UDA, UHDT/UGH and Pipelines) up to this point.

According to the evaluation, the contracted amounts (for the four contracts in analysis) is R\$ 2,669,848,785.06 above the paradigm amount (market benchmark, according to analysis made). However, considering that the degree of detail of the Basic Project (level FEL-3) adopted by Petrobras presents uncertainties in regard to quantitative data inserted in the acceptability range of the proposals, it is clear that, through the new range of variability of acceptability of the estimated values - variability of zero for tagged goods and materials with certain quantities, and 20% for the remainder of the estimate (acceptability criterion of the price proposals), that the overpricing found is R\$ 1,324,116,792.62 (or 14% of the paradigm value added to the acceptability range).

It should be noted that the methodology used by Petrobras for the development and release of the Basic Project for the bid (FEL-3 level), leads to uncertainty, especially in the quantitative data of services involved in the various contracts.

It happens to be that such uncertainties, which were not analyzed by this team for lack of budget detailing, could be minimized if Petrobras would make the bid with projects better defined, developed and detailed.

Having this in mind, resulting from this overpricing of R\$ 1,324,116,792.62 - calculated in an extremely conservative way when considering increases of 20% in the prices of services resulting from project inaccuracies - (estimate adjusted by Secob [Secretariat of Construction Works and Assets Inspection], increased by 20% in all items, except the tagged goods and certain quantities X contracted amounts), the auditing team considers it necessary to promote hearing of the persons responsible for the Petrobras Estimation and for the management of each of the contracts with overprice (UCR, UDA, UHDT/UGH and Pipelines).

## 3.1.3 - Objects in which the finding was encountered:

- (IG-P) [Grave Irregularities with Standstill Recommendation] Contract 0800.0053457.09.2, 02/05/2010, Delayed Coking Units (U-21 and U-22), its substations and Control Centers, its Regenerative Caustic Treatment Sections (U-26 and U-27), including material supply, partial supply equipment, construction electromechanical assembly, preservation, conditioning, testing, pre-operation, startup, assistance for operation, technical assistance and training in Northeast Abreu and Lima Refinery RNEST.
- (IG-P) [Grave Irregularities with Standstill Recommendation] Contract 0800.0053456.09-2, 01/28/2010, Services and supplies required for the implementation of Atmospheric Distillation Units UDA (U-II and U-12), of Abreu and Lima Refinery S.A RNEST, comprising the construction services, electromechanical assembly, materials supply, partial supply of equipment, preservation, conditioning, testing, pre-operation, startup, technical assistance for operation, technical assistance and training in Northeast Abreu and Lima Refinery RNEST, Consortium Rnest-Conest (Formed by the companies Odebrecht and Oas.
- (IG-P) [Grave Irregularities with Standstill Recommendation] Contract 0800.0055148.09-2, 02/09/2010, Unit of Diesel Hydro-treatment (U-31 and U-32), of Naphtha Hydro-treatment (U-33 and U-34) and of Hydrogen Generation UGH (U-35 and U-36), including material supply, partial supply of equipment, construction electromechanical assembly, preservation, conditioning, testing, pre-operation, start-up technical assistance for operations, technical assistance and training in Northeast Abreu and Lima Refinery RNEST.
- (IG-P) [Grave Irregularities with Standstill Recommendation] Contract 0800.0057000.10-2, 04/16/2010, Services and supplies required for the implementation of interconnection pipelines RNEST, comprising the consistency analysis services of the basic project, detailing project, supply of materials, partial supply of equipment, construction, electromechanical assembly, preservation, pump house, conditioning, testing, pre-operation, start-up, assistance for operation, technical assistance and training in Northeast Abreu e Lima Refinery RNEST.

## 3.1.4 - Causes for the occurrence of the findings:

Non-compliance with provisions of Art. 109 of LDO/2009;

Prices of inputs overestimated in the cost estimations;

Undue adoption of variation of quantitative data of goods with fixed items and certain quantities.

#### 3.1.5 - Effects/Consequences of the findings:

Procurement by higher prices if compared to market benchmarks, giving rise to loss for Petrobras (potential effect) - The loss identified as overpricing is potential, since contracts are in the starting phase and there is time for the necessary adjustments.

#### 3.1.6 - Criteria:

Judgment 325/2007, Federal Court of Auditors, Plenary;

Judgment 1599/2008, Federal Court of Auditors, Plenary;

Judgment 1607/2008, Federal Court of Auditors, Plenary:

Law 11768/2009, Art. 109

## 3.1.7 - Evidence:

Price analysis by the Auditing team; (Appendix 6 - Main body - pages 1/200)

Cost Estimates PETROBRAS - UDA 0800.0053456.09-2; (Appendix 1 - Main body - pages 3/83)

Cadterc - Volume 04 and 09; (Appendix 6 - Main - pages 1/200)

DIP [Internal Document of the Petrobras System] of the designation of the Bidding Committee - UDA, UHDT, UCR and Pipelines; (Appendix 6 - Main body - pages 1/200)

DIP [Internal Document of the Petrobras System] -- Report of Bidding Committee of the Enterprises, UDA UHDT, and UCR Pipelines; (Appendix 6 - Main body - pages 1/200)

Cost Estimates PETROBRAS - UCR 0800.0053457.09-2; (Appendix 2 - Main body - pages 3/68)

Cost Estimates PETROBRAS - UHDT / UGH 0800.0055148.09-2; (Appendix 3 - Main body - pages 3/78)

Cost Estimates PETROBRAS - PIPELINES 0800.0057000.10-2. (Appendix 4 - Main body - pages 2/186)

#### 3.1.8 - Clarification of the responsible parties:

Petrobras preliminarily expressed itself about the overpricing pointed out by auditing team, displaying clarification of only two points raised by the team regarding the overpricing, namely: variability range of acceptability of proposals, and additional rate of labor force attractiveness.

# (i) Range of Variability

Regarding the variability range for acceptability of proposals presented by the bidders, Petrobras mentions that the adopted methodology (FEL - Front End Loading) is a management system proposed by the IPA (Independent Project Analysis), an institute headquartered in the USA, and whose main function is to assess the feasibility of project implementation, having the level FEL-3 as the level of Full Basic Project for contracting.

Thus, the FEL methodology is not based only on quantitative data of materials, services or equipment in an isolated manner, but rather in a comprehensive manner; in that the variation refers to the Basic Project.

Petrobras further mentions that if the estimates were divided based on predetermined quantitative data or tagged equipment, two separate and autonomous estimates would be used, which would distort the technical support on which the knowledge and expertise of the preparation of cost estimates rests.

Thus, the FEL methodology is grounded on an investment assessment system, following criteria developed through studies and better practices, recommended by AACEI (Association for the Advancement of Cost Engineering International), of Cost Engineering, aiming to create a generic classification so that the estimates can have a stable benchmark for comparisons with what is usually performed in the construction industry, more specifically in the oil industry.

Petrobras also states that the methodology itself is a guideline and not a closed standard or absolute contracting parameter.

Thus, the pre-defined amount of equipment has two main purposes, namely: to ensure the quality of services performed and to prevent the pass-through of contingencies in prices offered by the bidders. Petrobras also mentions that "abruptly dividing the cost estimates would be dividing Petrobras' cost estimate in a number of minutely low estimates which, in turn, should have a specific variability range that would consider its own risks, and not the variables involving the estimate".

#### (ii) Percentage of attractiveness of direct labor

Regarding the percentage of attractiveness adopted by Petrobras in its cost estimates, for the salaries of the workers belonging to the group of direct labor, Petrobras emphasizes that the adoption of this percentage is necessary, since the region where the implantation works of the plant are being installed are not able to fully supply all the labor needed for the enterprise. It is also aforementioned that the very auditing team reports that it is an industrial region. Thus, Petrobras concludes that there is a competition for labor force, especially in regard to skilled labor, required for the installation of an enterprise of this magnitude.